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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,014	03/30/2004	Eiji Kimura	4468-017B	2801

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LOWE HAUPTMAN GILMAN & BERNER, LLP  
Suite 300  
1700 Diagonal Road  
Alexandria, VA 22314

EXAMINER

NGUYEN, TU T

ART UNIT PAPER NUMBER

2877

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/812,014

Applicant(s)

KIMURA, EIJI

Examiner

Tu T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-6, 11, 12, 15, 20, 21, 24, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-6, 11, 12, 15, 20, 21, 24, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☒ Certified copies of the priority documents have been received in Application No. 09/877,202.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

Figures 6(a), 6(b), 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Abstract***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

For this application, the abstract needs to be limited to a single paragraph and not to exceed 150 words.

### ***Specification***

The disclosure is objected to because of the following informalities:

- 1) In the "SUMMARY OF INVENTION" section (pages 3 – 22), all the claim number should be deleted.
- 2) Page 23, line 17, "Fig. 6 is illustration" should be changed to "Fig. 6(a), 6(b) are illustrations"

### ***Claim Objections***

Claims 3-5,12,15,21,24,30 are objected to because of the following informalities:

- 1) Claim 3, line 1, "the characteristics" should be changed to "characteristics".
- 2) Claim 3, line 2, "the first optical transmission line" should be changed to "a first transmission line".
- 3) Claim 3, line 3, "the second optical transmission line" should be changed to "a second optical transmission line".
- 4) Claim 3, line 3, "in the direction" should be changed to "in a direction".
- 5) Claim 3, lines 5-6, "the first variable wavelength light, the wavelength of which is variable" should be changed to "a first variable wavelength light" to enhance the meaning of the sentence.

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6) Claim 3, lines 7-8, " the first incident light" should be changed to "a first incident light".

7) Claim 3, line 12, "the second variable wavelength" should be changed to "a second variable wavelength" .

8) Claim 4, line 1, "according to claim 2" should be changed to "according to claim 3".

9) Claim 5, line 1, "according to claim 1" should be changed to "according to claim 3".

10) Claim 12, refer to discussion of elements 1-4,6-7 in claim 3 above.

11) Claim 15, refer to discussion of elements 1-7 in claim 3 above.

12) Claim 21, refer to discussion in claim 12 above.

13) Claim 24, refer to discussion in claim 11 above.

14) Claim 30, refer to discussion in claim 21 above.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-6,12,15,21,24,30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) Claim 3, lines 8-9, "the frequency of electrical signals inputted" is not clear.

The "frequency" lacks of antecedent and basis. It is not clear whether the light is

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modulated by a frequency or a signal. Which element generate “the frequency of electrical signals”?

2) Claim 3, lines 10-11, 18-19, “the optical/electrical conversion process” lacks of antecedent and basis. Do the first and second optical/electrical converting means use the same “the optical/electrical conversion process”?

3) Claim 3, line 14, the term “reference electrical signals of given frequencies” is not clear. What is the “given frequencies”?

4) Claim 3, lines 16-17, the term “the frequency of said reference signals” is not clear. It is not clear whether the light is modulated by a frequency or a signal.

5) Claim 4, line 2, “the optical/electrical conversion process” is not clear. Does the third optical/electrical converting means use the same “the optical/electrical conversion process” as in claim 1?

6) Claim 5, lines 2-4, the phrase “between the electrical ... reference electrical signals” is not clear. It is not clear how the comparing means work.

7) Claim 6, lines 2-4, refer to discussion in claim 5 above.

8) Claim 12, line 9; Claim 24, lines 15-16, Claim 30, lines 10-11, refer to discussion of element # 3, claim 1 above.

9) Claim 15, line 14, refer to discussion in claim 12 above.

10) Claim 15, lines 16-17; Claim 24, lines 9-10, refer to discussion in element 1 in claim 1 above.

11) Claim 21, line 9, refer to discussion in claim 12 above.

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12) Claim 21, lines 11-12, Claim 24, line 19, Claim 30, line 14, refer to discussion in element 4 of claim 1 above.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 11,20,29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7,20,29 of copending Application No. 09/877,202, claims 7,16,25. Although the conflicting claims

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are not identical, they are not patentably distinct from each other because all the limitations in claims 11,20,29 of application 10/812,014 are disclosed by the copending Application No. 09/877,202.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Claims 3-6,12,15,21,24,30 appear to read over the prior arts of record due to the structural arrangement of the elements: a first optical/electrical converting means, a second variable wavelength light, a signal generating means and a second light modulating means. However, due to the 112 problems discussed above, the patentability of the claims could not be determined in this office action because it is unclear how the claims will be amended.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley Jr. can be reached on (571) 272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu T. Nguyen  
Primary Examiner  
Art Unit 2877

09/28/2004